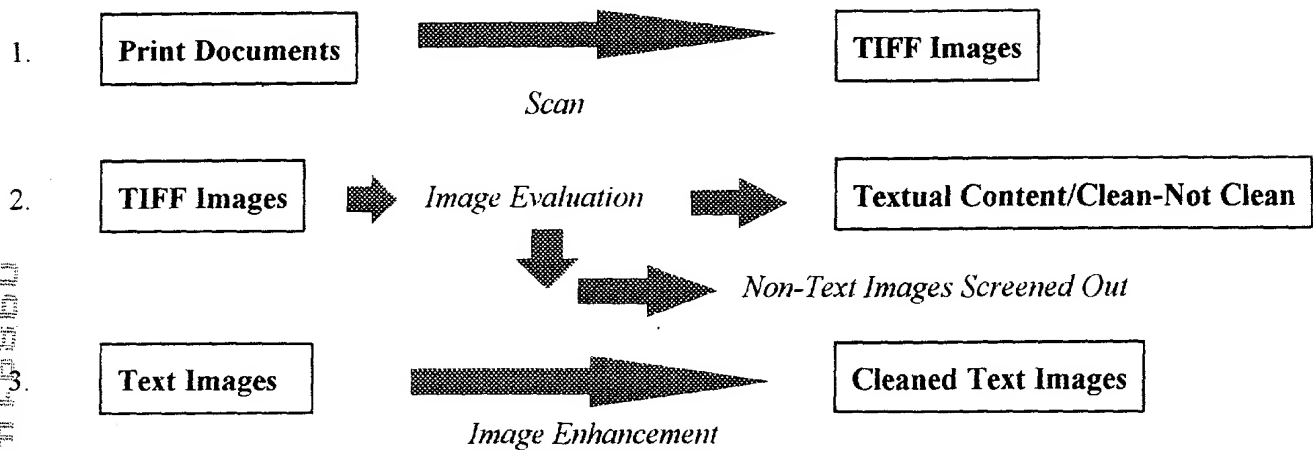


Figure 1

Image-to-Data Processing System:

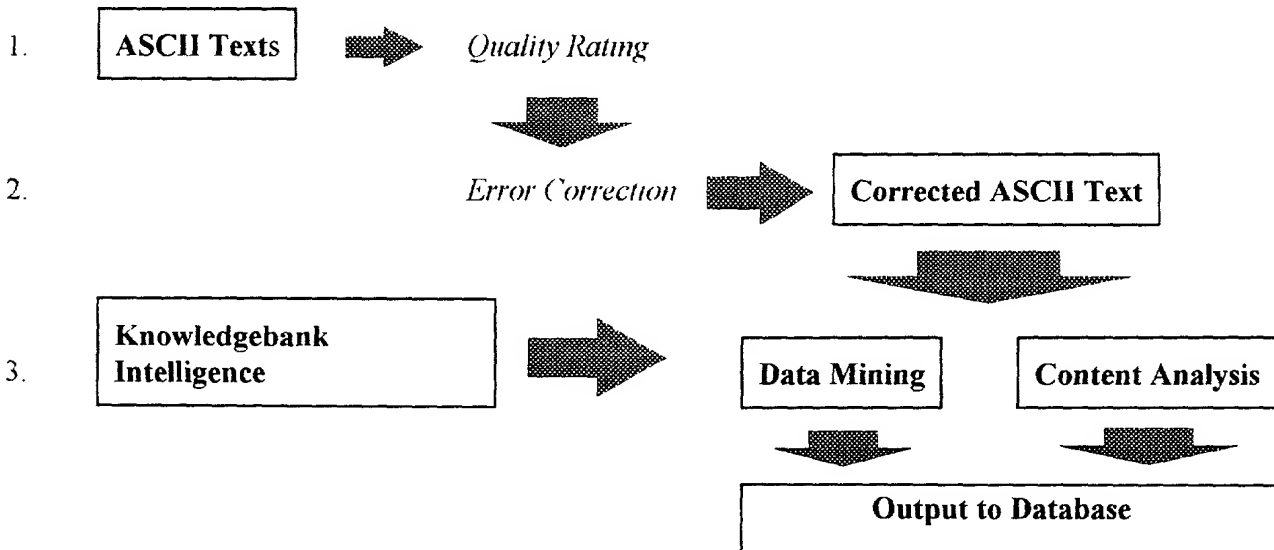
Pre-OCR Processes

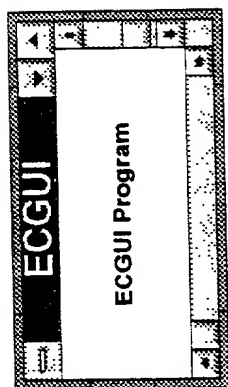
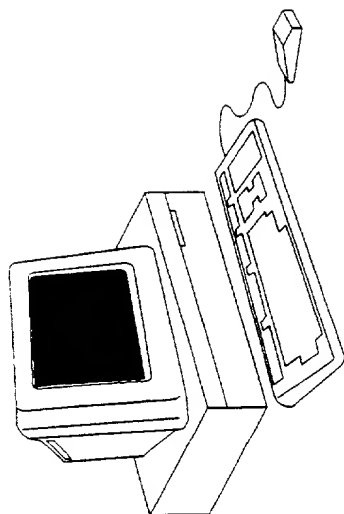


Optical Character Recognition: Image-to-Text Conversion

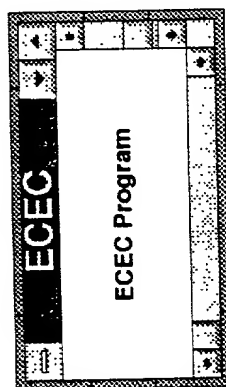


Post-OCR Processes: Text-to-Data Conversion





OR



OR

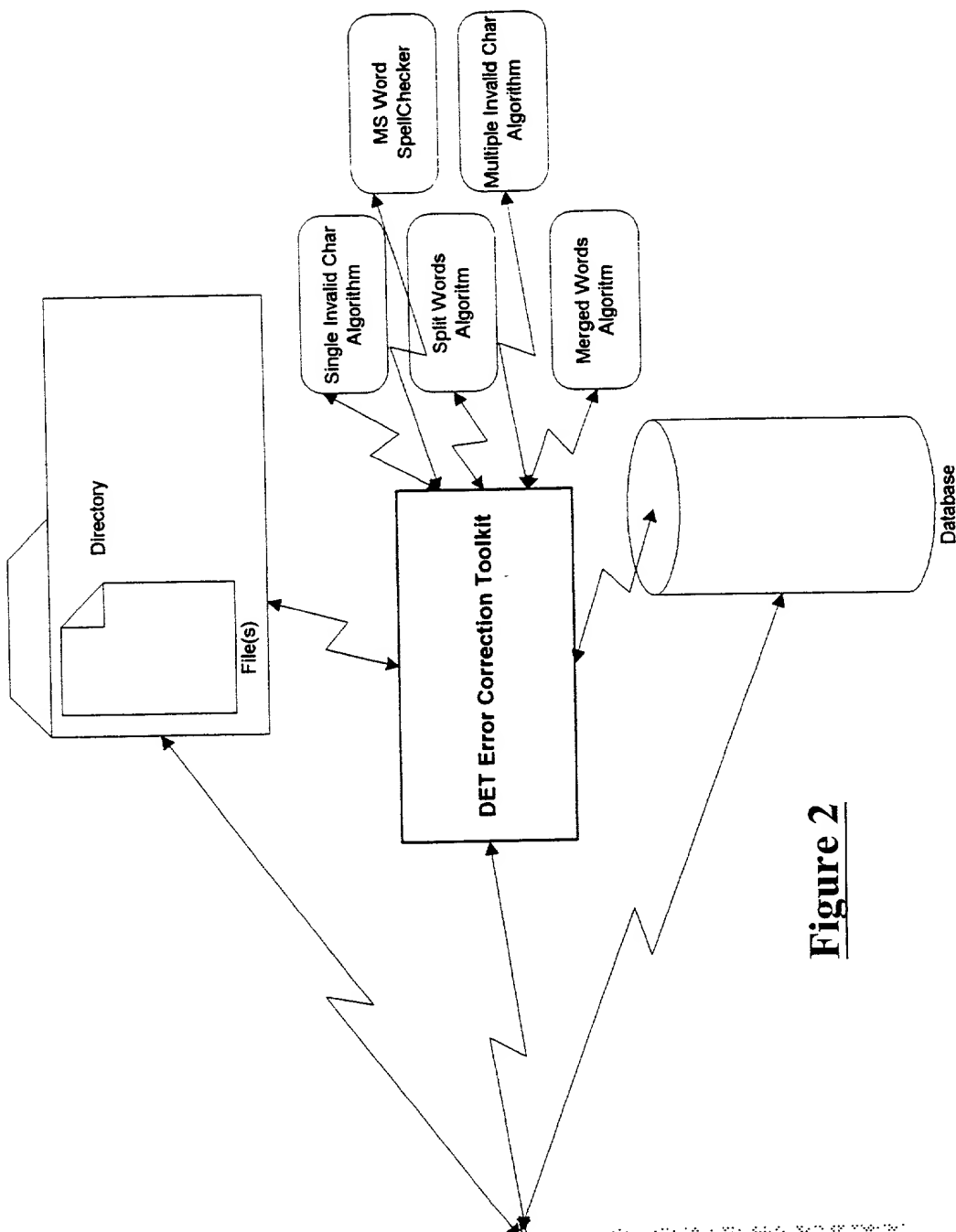
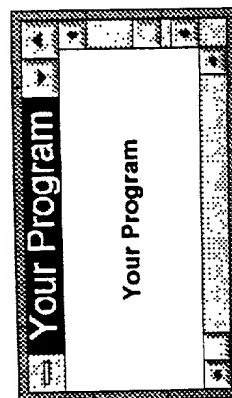


Figure 2

Computer-Aided Error Correction

Figure 3

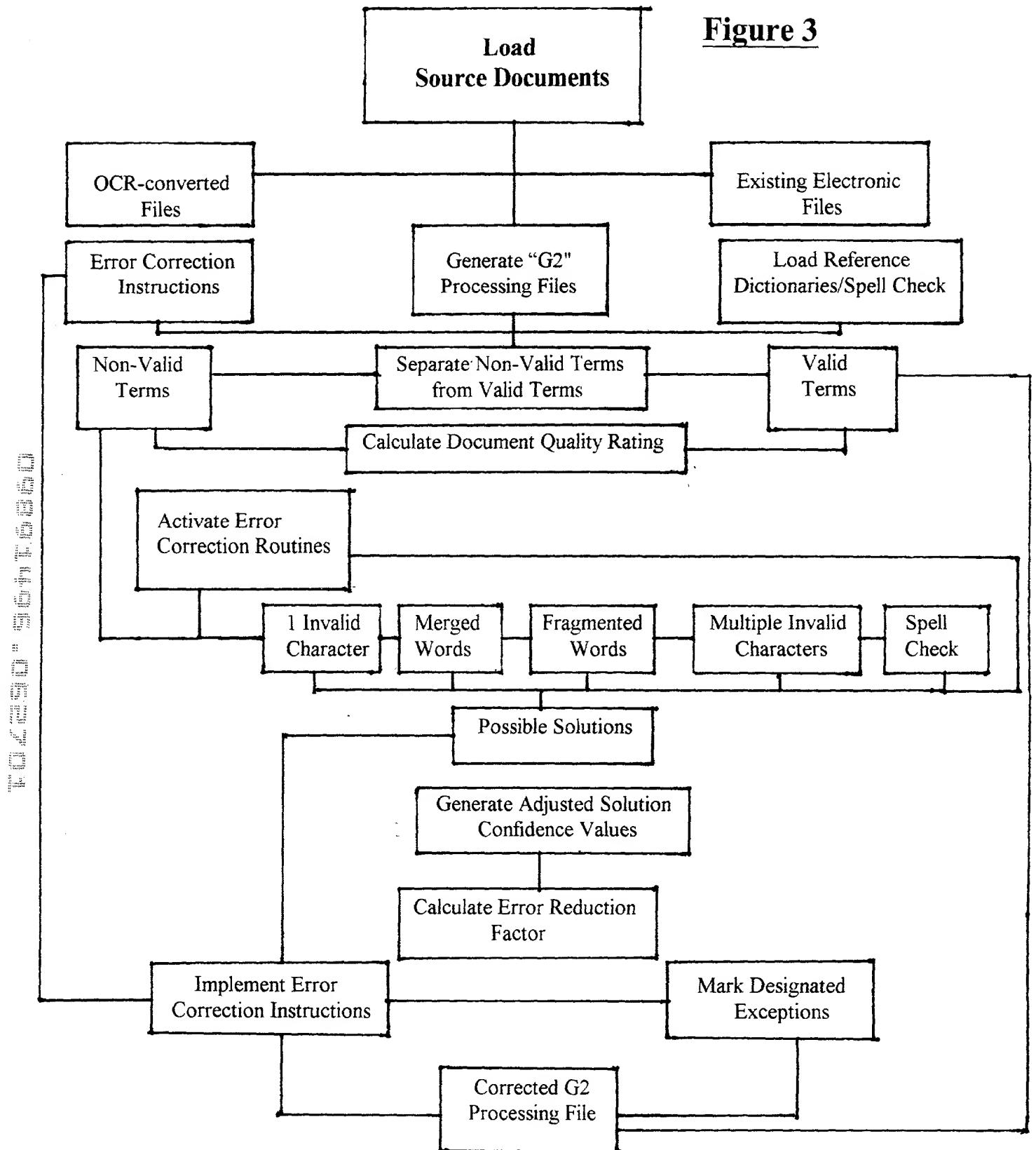


Figure 4

Diagram: Screening

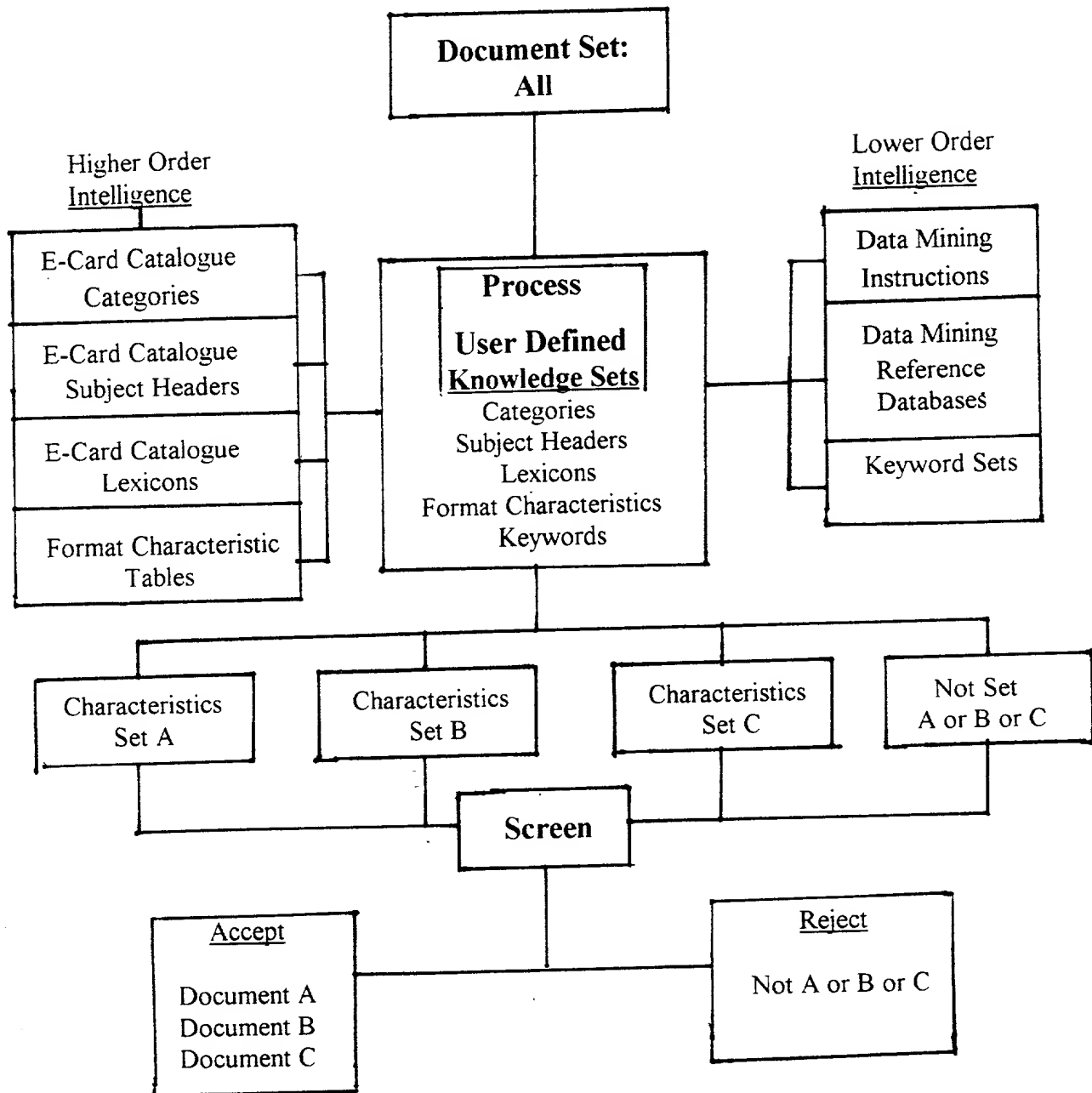
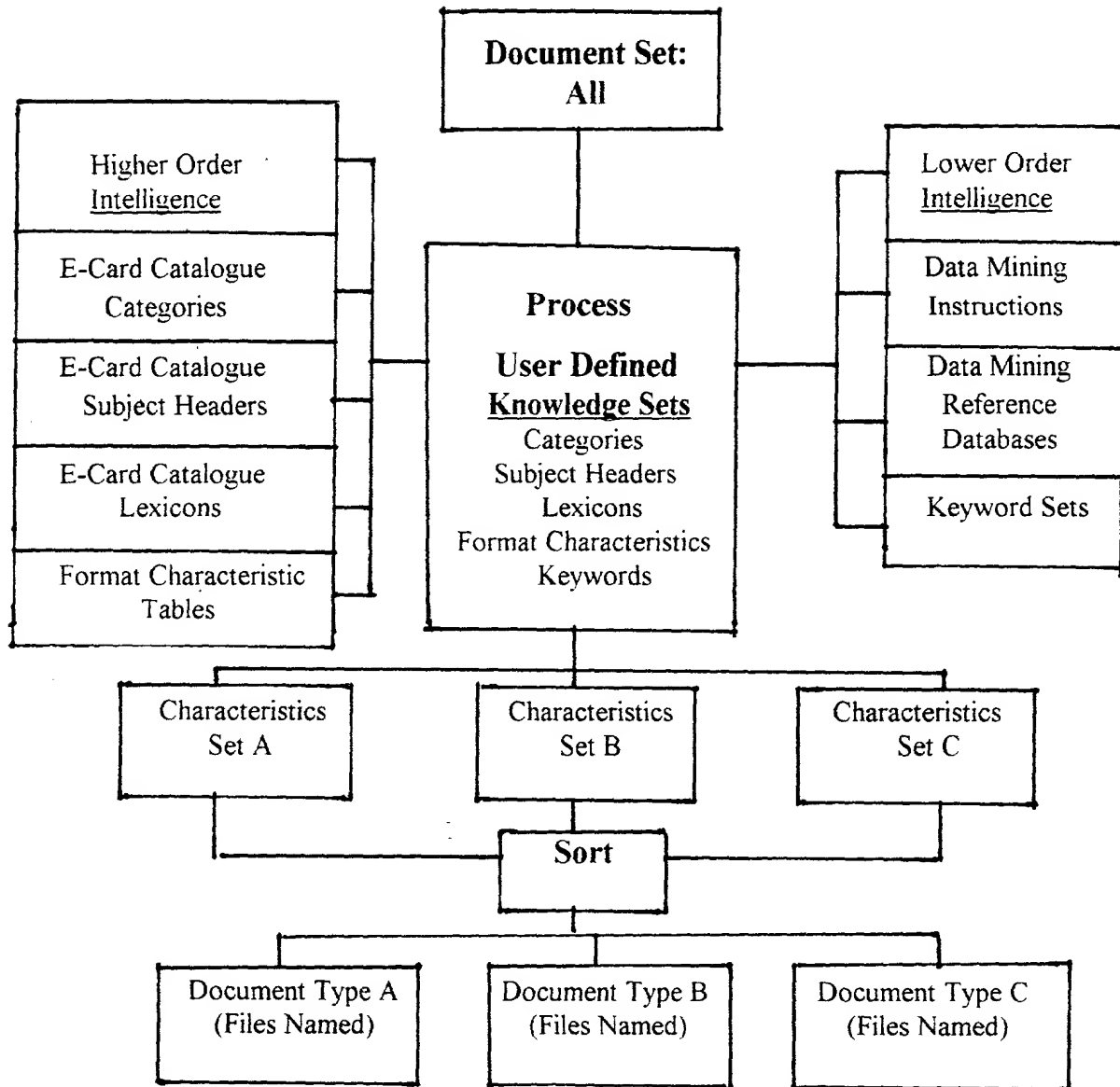


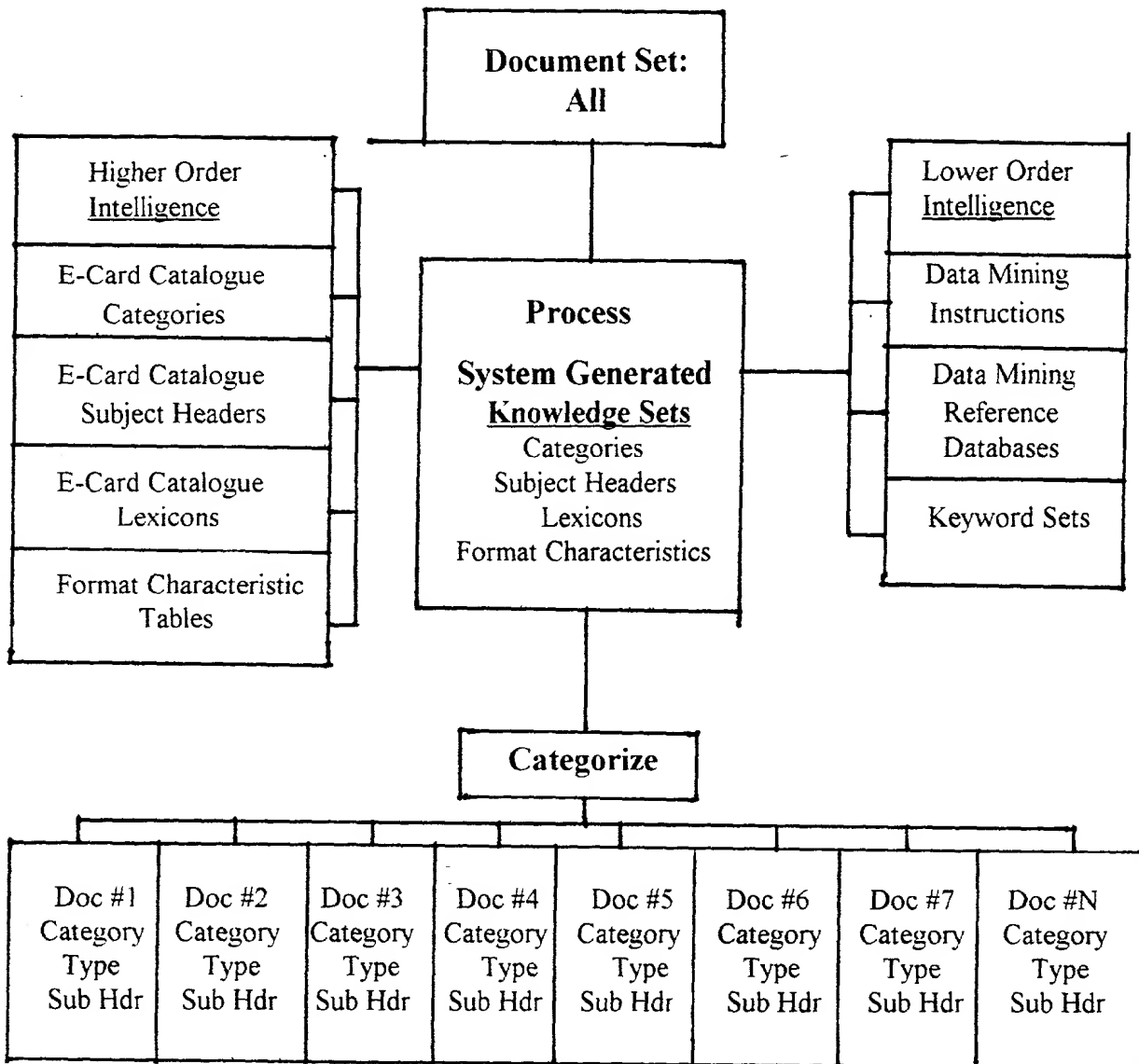
Figure 5

Diagram: Sorting



[illegible]

Diagram: Characterizing



Variable	Mean		SD		t		p	
	Control	Case	Control	Case	Control	Case	Control	Case
Age	30.5	30.5	1.2	1.2	0.0	0.0	0.999	0.999
Sex	15	15	0	0	0.0	0.0	0.999	0.999
Education	12.5	12.5	1.0	1.0	0.0	0.0	0.999	0.999
Occupation	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Income	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Marital status	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Religion	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Health status	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Family size	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Urban/rural	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Employment	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Marital satisfaction	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Family cohesion	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Parenting style	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child development	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child behavior	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child health	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child education	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child employment	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child marital status	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child religion	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child health status	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child family size	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child urban/rural	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child employment	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child marital satisfaction	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child family cohesion	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child parenting style	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child development	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child behavior	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child health	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child education	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child employment	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child marital status	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child religion	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child health status	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child family size	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child urban/rural	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child employment	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child marital satisfaction	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child family cohesion	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child parenting style	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child development	1.5	1.5	0.5	0.5	0.0	0.0	0.999	0.999
Child behavior	1.5	1.5	0.					

Diagram: Abstracting

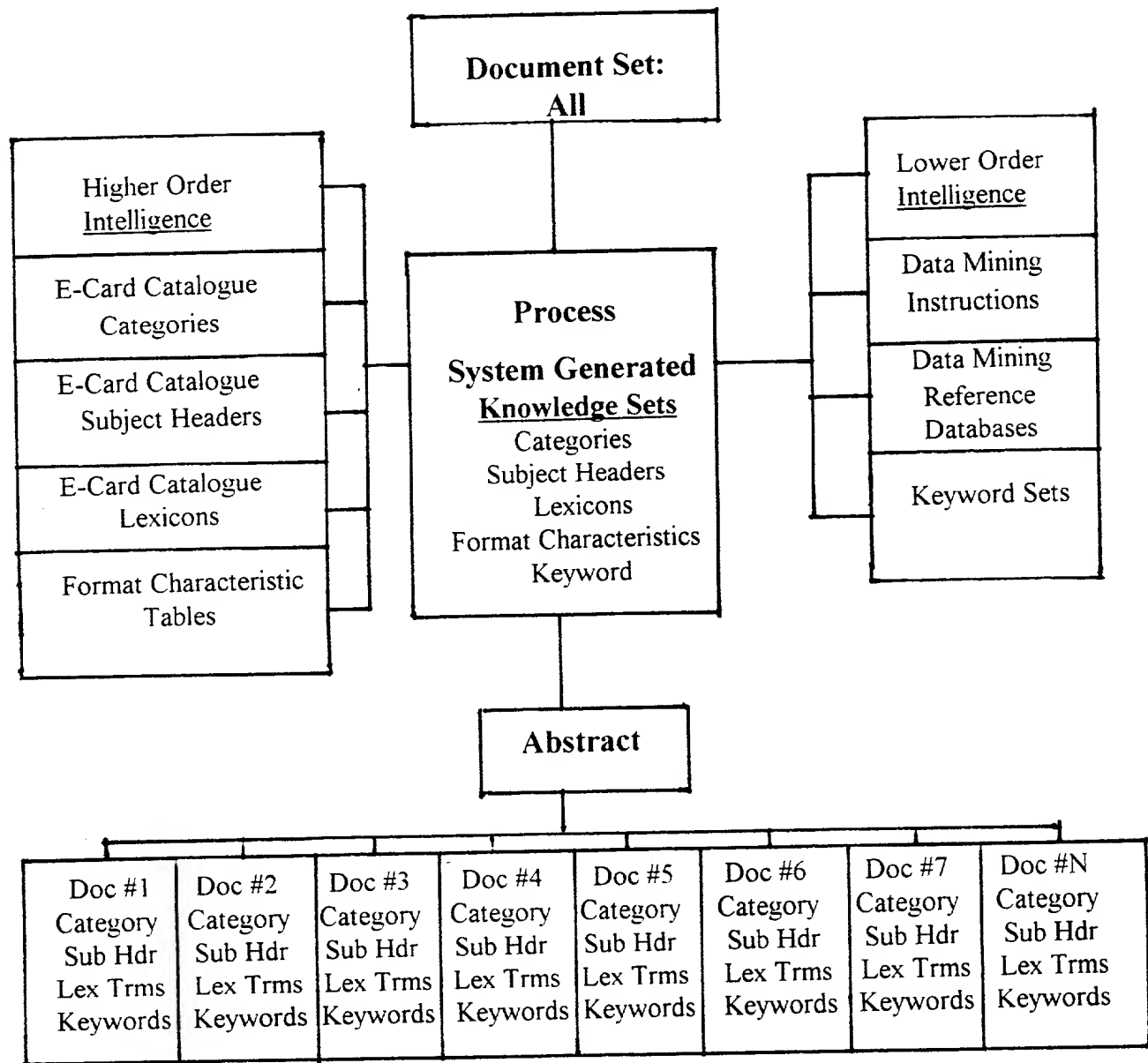


Figure 8

Diagram: Profiling

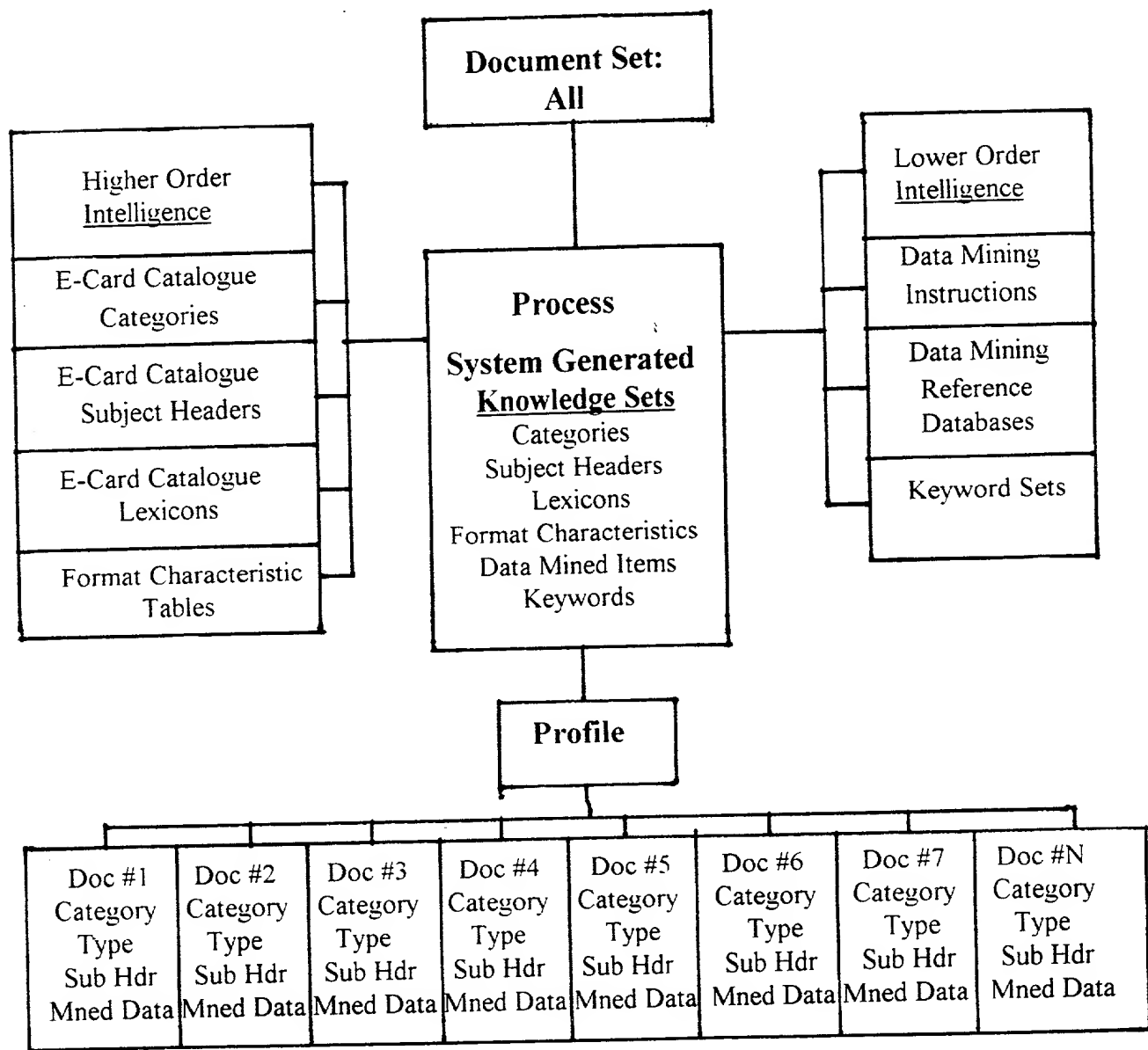
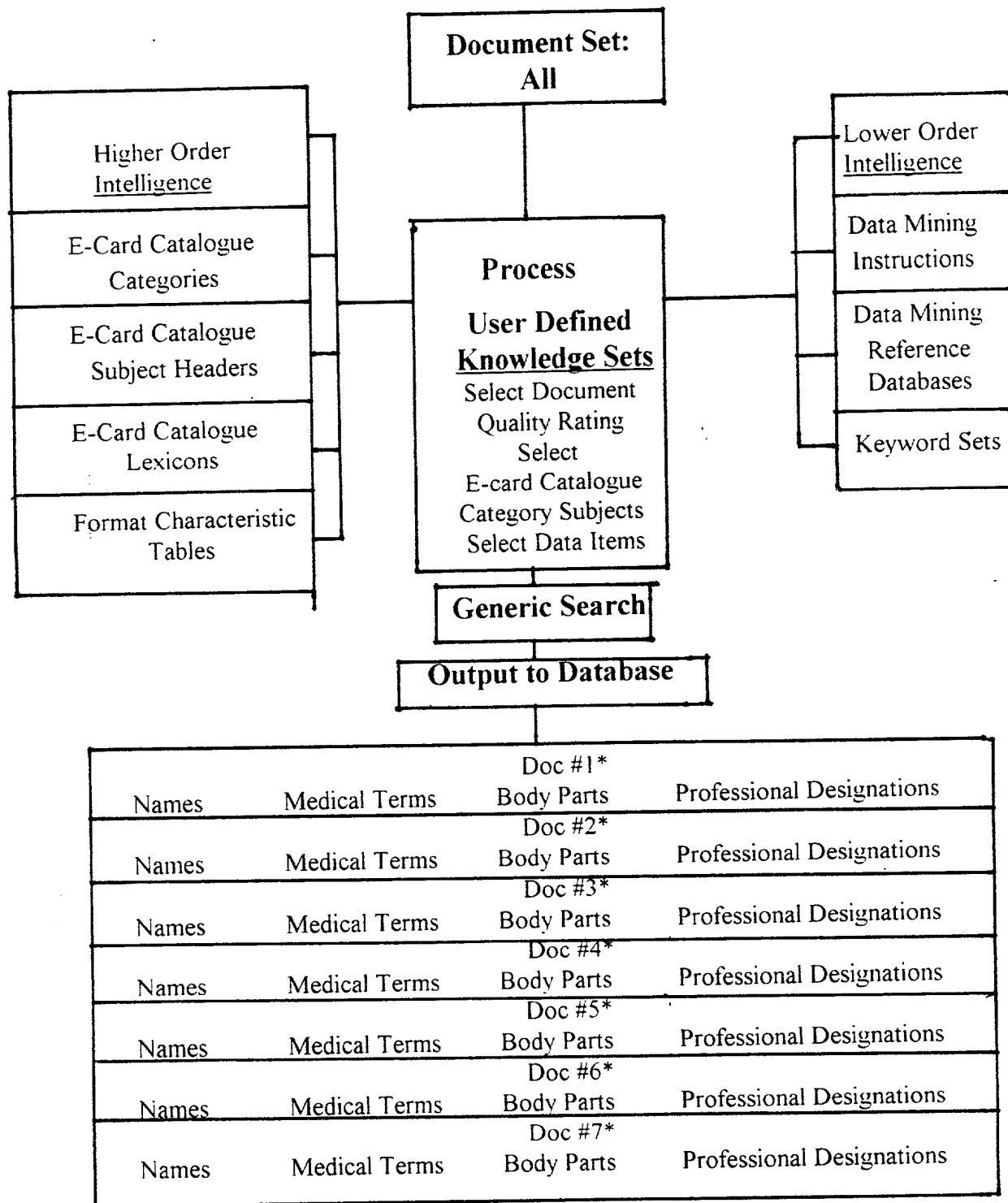


Figure 9

Diagram: Generic Searching



* as an example

Figure 10

Diagram: Data Mining

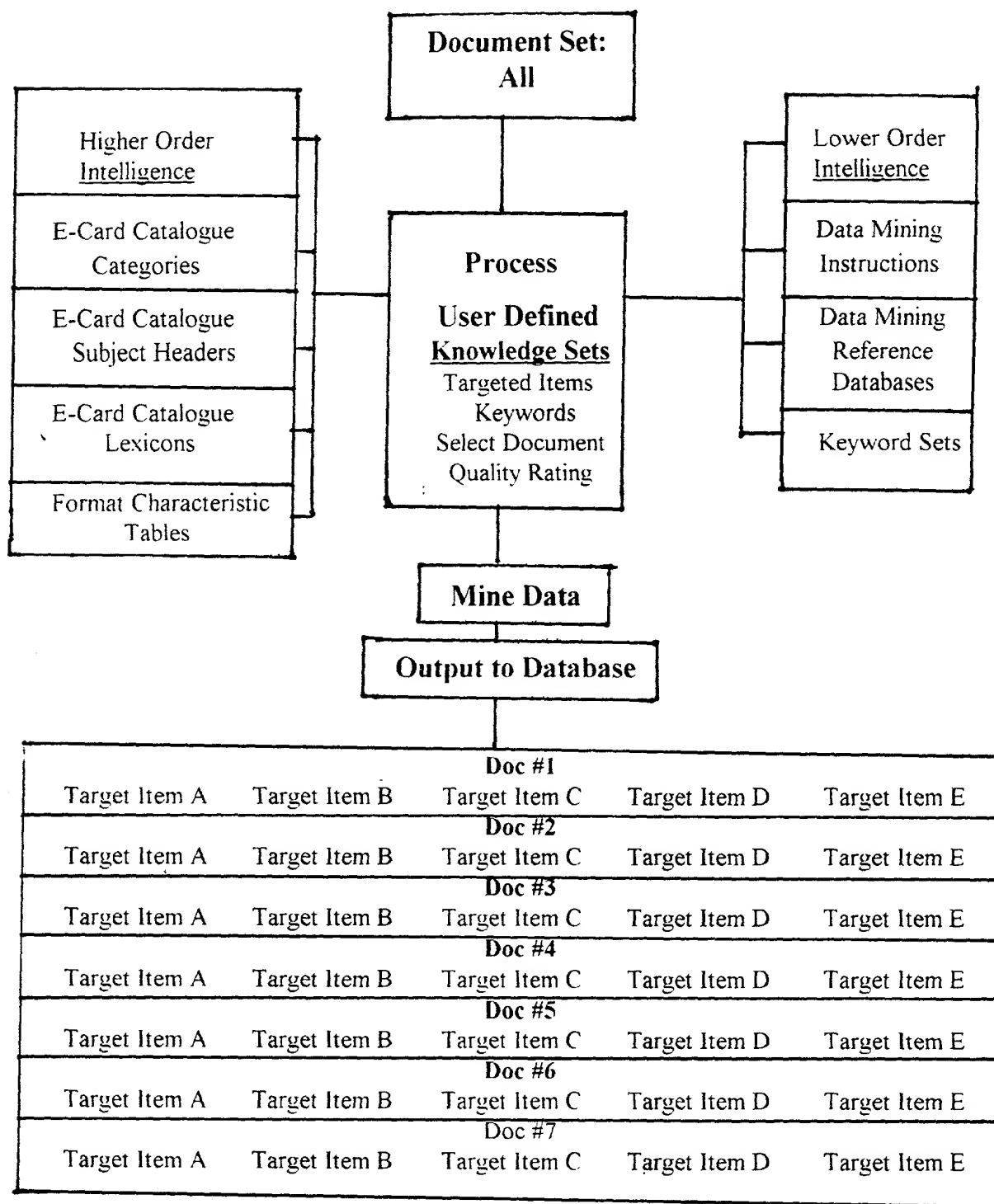
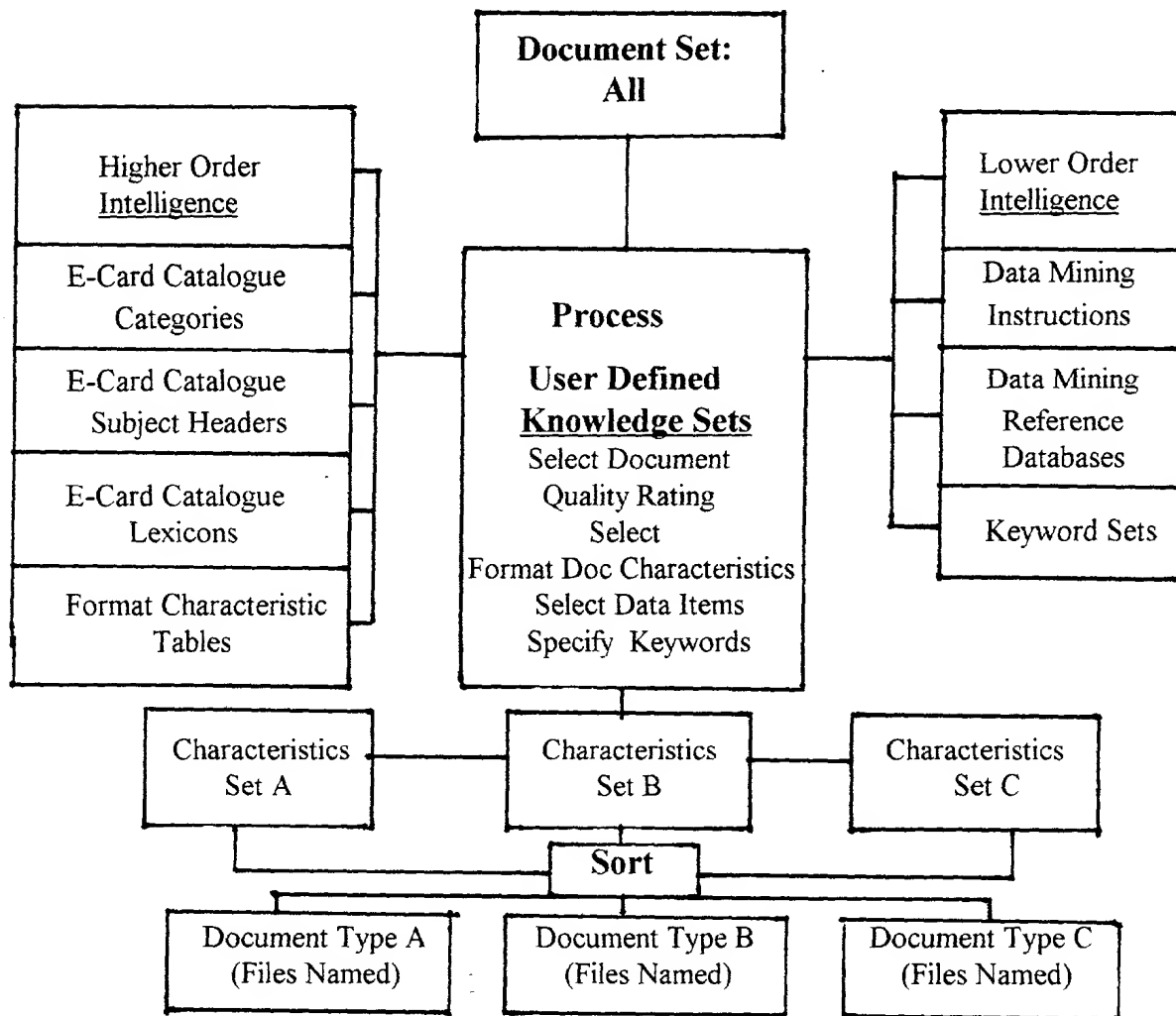


Figure 11

Diagram: Non Standard Forms Processing



Mine Data Appropriate to Document Type

Document Type A
(File Name)
Mined Data
(File Name)
Mined Data
(File Name)
Mined Data

Document Type B
(File Name)
Mined Data
(File Name)
Mined Data
(File Name)
Mined Data

Document Type C
(File Name)
Mined Data
(File Name)
Mined Data
(File Name)
Mined Data

Output to Database

Figure 12

Word list and index table
<word> <index#>

alpha	1004
...	
animal	1027
...	
astrophysics	2070
...	
botany	2903
...	
zoology	9900

Unit Grouping
Actual Unit Bit Array

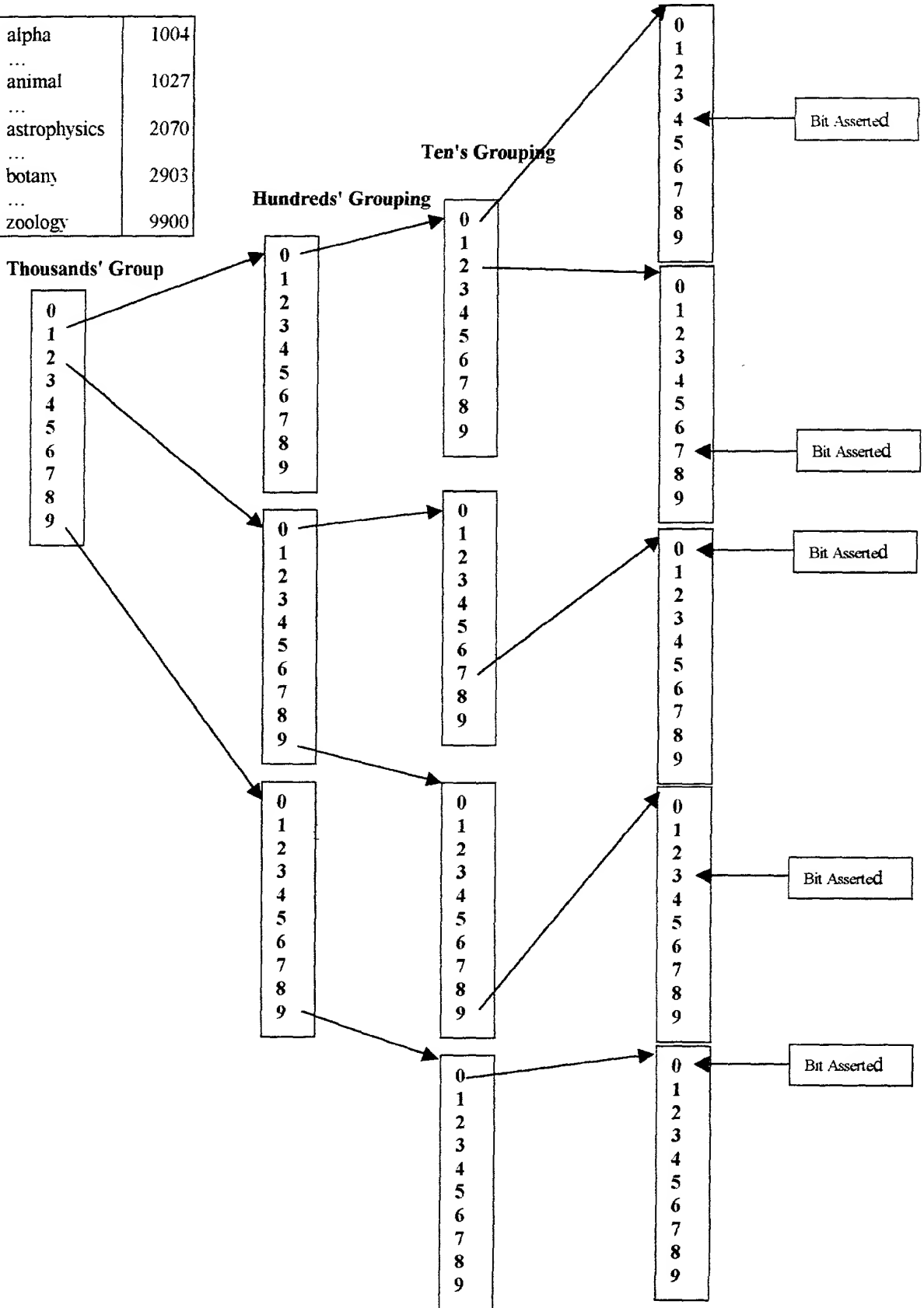


Figure 13

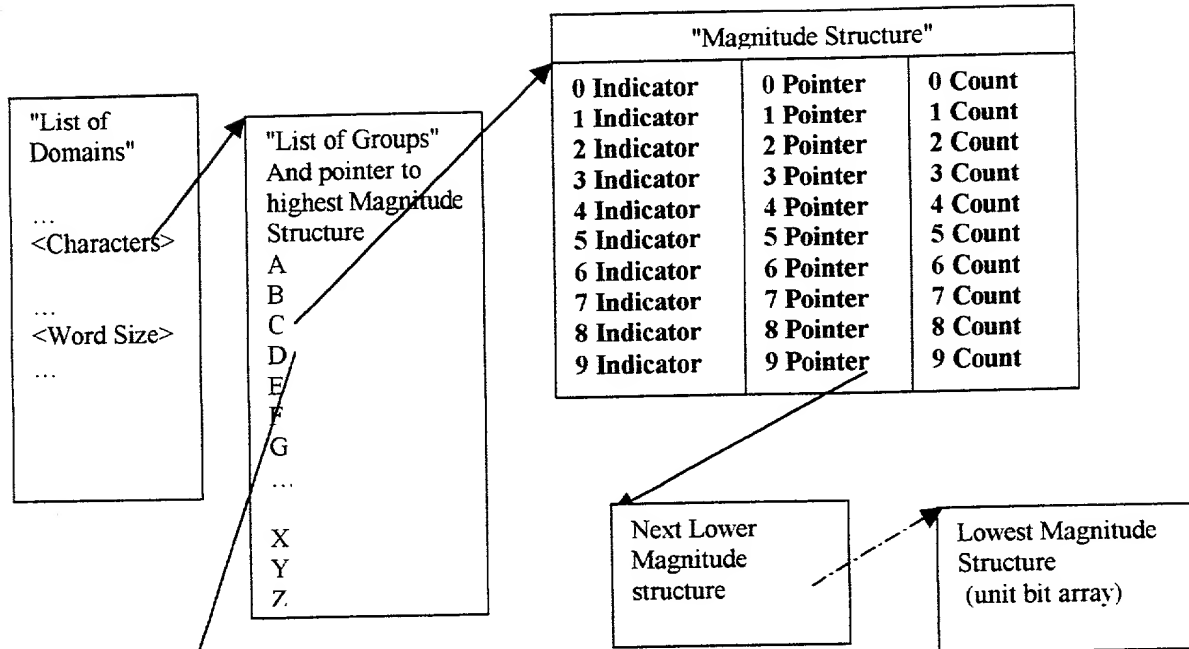


Figure 2a Actual Memory Mapping for the Full Array

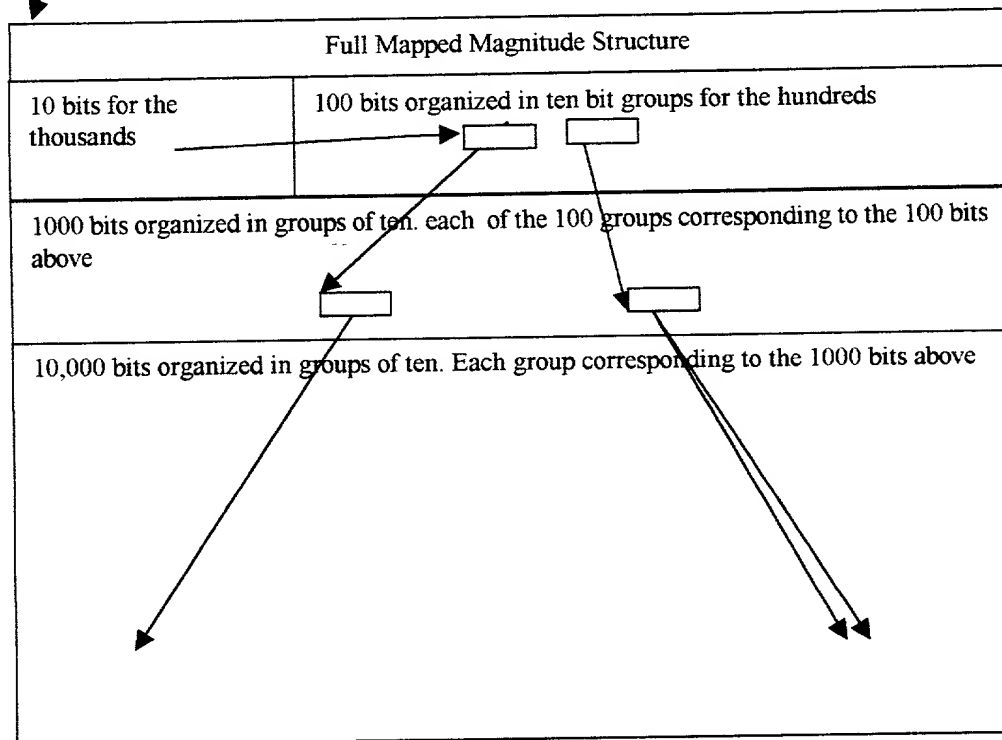


Figure 14

